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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,528	03/11/2005	Toshiyuki Tsubouchi	267014US0PCT	7444
22850 7590 10/11/2007 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER MCAVOY, ELLEN M	
			ART UNIT	PAPER NUMBER
			1797	
			NOTIFICATION DATE	DELIVERY MODE
			10/11/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/527,528

Applicant(s)

TSUBOUCHI ET AL.

Examiner

Ellen M. McAvoy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 11 March 2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishida et al (6,638,417) and Matsuno et al (6,191,330).

Ishida et al ["Ishida"] disclose a traction drive fluid comprising a naphthenic compound represented by formula (I) in column 2 wherein substituent R¹ is an alkyl group, substituents R², R³ and R⁴ are each hydrogen or an alkyl group and substituent A is a naphthenic hydrocarbon group, a saturated polycyclic hydrocarbon group, a naphthenic ester group or a naphthenic carbonate group. The traction drive fluid may comprise several other naphthenic compounds represented by formulas (2) through (7) set forth in columns 2 and 3, and mixtures thereof. The examiner is of the position that the naphthenic traction drive fluids of Ishida meet the limitations of base oil component (A) of the claims which is very broadly drawn to a fluid "bearing at least one selected from a quaternary carbon atom or an alicyclic structure in the molecule". Ishida teaches that the traction drive fluids are preferably blended with (B) a viscosity index improver which is preferably an ethylene-alpha-olefin copolymer having a number average molecular weight from 800 to 150,000 or a hydride thereof. See column 4, lines 12-32. The alpha-olefin may be propylene and 1-butene. Ishida teaches that copolymer (B) may be added to the traction drive fluid in an amount of 0.1 to 20 % by mass. See column 22, lines 31-38. The examiner is

of the position that the viscosity index improvers of Ishida meet the limitations of hydrocarbon polymer component (B) which comprise at least 25% of quaternary carbon atoms. Applicants' invention differs in depending claims 3 and 6 by specifying properties such as traction coefficient, kinematic viscosity, viscosity index, pour point and flash point of base oil component (A) which are not taught in Ishida. However, the examiner is of the position that since the naphthenic base oils of Ishida are indistinguishable from the claimed base oils, the claimed properties are seen to be the same or similar.

Matsuno et al ["Matsuno"] disclose traction drive fluids which comprise (A) one or more saturated polycyclic hydrocarbon compounds represented by formula (1), (2) and (3) and mixtures thereof. The examiner is of the position that the traction drive fluids of Matsuno meet the limitations of base oil component (A) of the claims which is very broadly drawn to a fluid "bearing at least one selected from a quaternary carbon atom or an alicyclic structure in the molecule". Matsuno teaches that the traction drive fluids are preferably blended with (D) a viscosity index improver which is preferably an ethylene-alpha-olefin copolymer having a number average molecular weight from 800 to 150,000 or a hydride thereof. See column 1, line 53 to column 2, line 64. The alpha-olefin may be propylene and 1-butene. Ishida teaches that copolymer (B) may be added to the traction drive fluid in an amount of 0.1 to 20 % by mass. See column 12, line 46 to column 13, line 7. The examiner is of the position that the viscosity index improvers of Ishida meet the limitations of hydrocarbon polymer component (B) which comprise at least 25% of quaternary carbon atoms. Applicants' invention differs in depending claims 3 and 6 by specifying properties such as traction coefficient, kinematic viscosity,

viscosity index, pour point and flash point of base oil component (A) which are not taught in Matsuno. However, the examiner is of the position that since the naphthenic base oils of Matsuno are indistinguishable from the claimed base oils, the claimed properties are seen to be the same or similar.

Claim Rejections - 35 USC § 103

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al (6,319,879) in combination with Ishida et al (6,638,417) and Matsuno et al (6,191,330).

Yoshida et al ["Yoshida"] disclose derivatives of bicyclo[2.2.1]heptane useful as traction drive fluids, represented by formula (VII) in column 2, which have a high traction coefficient under high temperatures and an excellent viscosity characteristic under low temperatures.

Yoshida teaches that the traction drive fluids have the following properties: (a) molecular weight of 210 or larger, (b) kinematic viscosity at 40°C of 10-25 mm²/s, (c) viscosity index of 60 or higher, (d) pour point of -40°C or lower, (e) density at 20°C of 0.93 g/cm³ or higher, and (f) traction coefficient at 140°C of 90% or higher of the coefficient of 2,4-dicyclohexyl-2-methylpentane. See column 3, lines 1-15. The examiner is of the position that the traction drive fluids of Yoshida meet the limitations of base oil component (A) of the claims which is very broadly drawn to a fluid "bearing at least one selected from a quaternary carbon atom or an alicyclic structure in the molecule". Applicants' invention differs by adding component (B), a hydrocarbon polymer which acts as a viscosity index improver, to the traction drive fluid.

However, Yoshida allows for the addition of conventional additives to the traction drive fluid

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including viscosity index improvers. See column 11, lines 45-50. Ishida and Matsuno, which disclose the addition of hydrocarbon polymers as viscosity index improver to traction drive fluids, are relied on as outlined above. Having the prior art references to the inventors at the time the invention was made it would have been obvious to the skilled artisan to have followed the teachings of the prior art and to have added conventional hydrocarbon viscosity index improvers, taught by Ishida and Matsuno to the traction drive fluid compositions of Yoshida if so desired.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicants' disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen M. McAvoy whose telephone number is (571) 272-1451.

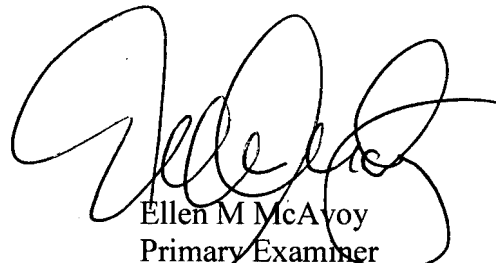
The examiner can normally be reached on M-F (7:30-5:00) with alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR

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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Ellen M McAvoy
Primary Examiner
Art Unit 1764

EMcAvoy
September 28, 2007